

## LITTLE COLORADO RIVER BASIN

## 09384000 LITTLE COLORADO RIVER ABOVE LYMAN LAKE, NEAR ST. JOHNS, AZ

**LOCATION**--Lat 34°18'52", long 109°21'42", in SW<sub>1</sub>/4SE<sub>1</sub>/4 sec. 27, T.11 N., R.28 E., Apache County, Hydrologic Unit 15020001, on left bank 0.75 mi downstream from Coyote Creek, 6 mi upstream from Lyman Dam, and 15 mi south of St. Johns.

**DRAINAGE AREA**--706 mi<sup>2</sup>, of which 2.5 mi<sup>2</sup> is noncontributing.

**PERIOD OF RECORD**--Apr. 1940 to current year. Prior to Oct. 1975 published as "above Lyman Reservoir."

**REVISED RECORDS**--WDR AZ-88-1: Drainage area.

**GAGE**--Water-stage recorder and crest-stage gage. Elevation of gage is 6,010 ft above sea level, from topographic map. Prior to Dec. 7, 1976, water-stage recorder at site 0.4 mi downstream at datum approximately 20 ft lower, used as supplemental gage Mar. 21, 1980, to Apr. 21, 1987. See WSP 1313 for history of changes prior to 1950.

**REMARKS**--Records fair, except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs—combined capacity, about 15,500 acre-ft. Diversions for irrigation of about 6,700 acres above station.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge, 16,000 ft<sup>3</sup>/s July 25, 1940, gage height, 17.1 ft, datum then in use, from floodmarks, by slope-area measurement of peak flow and reservoir inflow studies; maximum gage height, 18.6 ft, Sept. 12, 1975, at previous site (from graph recorded to 18.4 ft); no flow at times.

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 400 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug. 10.....	2230	*1,110	*6.78

Minimum daily discharge, 0.95 ft<sup>3</sup>/s, July 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	9.8	e6.5	49	11	17	29	64	30	4.1	2.5	7.7
2	2.2	9.1	e5.8	42	9.3	17	18	61	28	6.6	5.8	8.4
3	2.1	8.1	5.7	38	9.2	16	13	58	26	5.3	5.5	19
4	1.8	7.0	e7.6	35	9.6	16	22	60	24	3.4	3.6	18
5	1.8	6.9	e7.7	23	11	15	37	59	22	3.1	5.8	19
6	1.8	6.6	7.4	e16	11	16	49	52	21	2.3	5.0	19
7	1.7	6.2	e7.1	e14	10	17	62	47	20	2.0	22	17
8	1.8	5.3	7.0	15	9.6	16	97	46	17	1.5	11	17
9	1.5	9.3	7.0	16	9.7	16	116	49	15	3.3	33	18
10	1.8	10	7.0	16	9.5	16	102	43	13	3.8	104	18
11	2.4	7.6	7.2	15	12	17	78	39	12	1.7	54	17
12	2.5	6.0	6.6	15	16	19	71	36	8.2	1.9	20	15
13	2.7	6.7	6.5	e12	22	23	86	31	6.5	2.2	21	13
14	3.3	6.5	6.3	12	20	30	131	30	6.7	1.9	20	12
15	3.0	5.9	5.3	e11	18	38	144	29	16	1.5	21	11
16	2.9	6.0	5.1	e11	17	35	138	28	14	1.3	19	10
17	3.2	6.3	e4.6	e11	16	38	136	25	11	2.2	36	9.2
18	2.8	6.5	e4.3	e11	16	36	128	24	8.9	3.6	46	6.8
19	3.3	6.8	e4.6	11	20	34	108	21	5.9	2.6	35	6.4
20	3.5	7.2	e4.9	10	33	33	85	18	7.1	2.6	28	6.5
21	3.8	7.3	5.0	11	31	33	72	19	7.2	1.9	23	6.0
22	4.5	6.9	5.1	11	27	31	71	21	6.9	0.95	20	5.7
23	7.8	7.2	e4.6	10	23	29	65	23	7.8	0.96	19	5.4
24	7.2	6.7	e4.1	11	21	30	89	23	12	1.8	24	5.4
25	6.9	6.5	e4.1	12	20	31	129	26	8.7	2.0	21	5.7
26	6.9	6.1	4.6	12	20	35	102	32	10	2.8	15	5.4
27	7.8	5.8	5.8	13	20	34	86	33	6.9	4.0	15	5.5
28	7.8	5.8	6.9	14	19	36	76	34	5.1	2.8	13	5.3
29	11	6.1	7.4	12	---	37	70	36	5.8	1.7	12	5.0
30	12	e6.7	95	12	---	38	67	34	4.8	2.1	9.3	5.1
31	11	---	63	12	---	32	---	31	---	2.6	7.7	---
TOTAL	134.9	208.9	329.8	513	470.9	831	2477	1132	387.5	80.51	677.2	322.5
MEAN	4.35	6.96	10.6	16.5	16.8	26.8	82.6	36.5	12.9	2.60	21.8	10.8
MAX	12	10	95	49	33	38	144	64	30	6.6	104	19
MIN	1.5	5.3	4.1	10	9.2	15	13	18	4.8	0.95	2.5	5.0
AC-FT	268	414	654	1020	934	1650	4910	2250	769	160	1340	640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2005, BY WATER YEAR (WY)

MEAN	9.01	7.81	9.73	10.4	12.3	29.9	90.9	34.9	9.10	9.36	22.4	12.7
MAX	213	37.8	46.6	38.9	43.3	182	397	374	95.4	40.3	143	105
(WY)	1984	1987	1979	1942	1962	1985	1979	1941	1973	1967	1955	1946
MIN	0.07	0.32	0.83	2.08	2.84	1.89	1.26	0.44	0.01	0.00	0.59	0.02
(WY)	1957	1957	1957	1957	1990	1996	2000	1959	1963	2000	1960	1960

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1941 - 2005

ANNUAL TOTAL	3945.25	7565.21		
ANNUAL MEAN	10.8	20.7	21.5	
HIGHEST ANNUAL MEAN			71.6	1973
LOWEST ANNUAL MEAN			2.94	1961
HIGHEST DAILY MEAN	106	Apr 14	144	Apr 15
LOWEST DAILY MEAN	0.08	Sep 14	0.95	Jul 22
ANNUAL SEVEN-DAY MINIMUM	0.09	Jun 15	1.7	Oct 4
ANNUAL RUNOFF (AC-FT)	7830		15010	15590
10 PERCENT EXCEEDS	40		49	42
50 PERCENT EXCEEDS	3.2		11	6.7
90 PERCENT EXCEEDS	0.15		2.8	1.0

e Estimated